

a supply air motor for supplying air at a supply air pressure through a supply air channel to the at least one room;

cooling-heating means for adjusting a temperature of the supply air;

means for regulating an increase in pressure in the at least one room relative to an outside pressure, to vary the room pressure in correspondence to the selected room temperature.

ordinary
VAV
system
does this?
?

Claim 45. The air-conditioning apparatus of claim 44 further comprising a control arrangement for controlling the cooling-heating means to adjust the temperature of the supply air.

conventional

✓ Claim 46. The air-conditioning apparatus of claim 44 wherein the regulating means further regulates the room pressure relative to an outside air temperature.

special

NE ✓ Claim 47. The air-conditioning apparatus of claim 44 wherein the regulating means further regulates the room pressure relative to the supply air temperature.

special 2

NE ✓ Claim 48. The air-conditioning apparatus of claim 44 wherein the regulating means further regulates the room pressure relative to the supply air pressure.

special

NE ✓ Claim 49. The air-conditioning apparatus of claim 44 wherein the regulating means further regulates the room pressure relative to the supply air temperature and a supply air pressure.

special

NE ✓ Claim 50. The air-conditioning apparatus of claim 44 wherein the regulating means regulates the room pressure relative to the supply air temperature and an outside air temperature.

special

Claim 51. The air-conditioning apparatus of claim 44 wherein the regulating means regulates the room pressure by adjusting the supply air motor to alter the supply air pressure.

2 normal VAV

maybe
normally
also.

Claim 52. The air-conditioning apparatus of claim 44 further comprising a control valve disposed in the supply air channel and wherein the regulating means regulates the room pressure by adjusting the control valve.

VAV inlet valve.
Not by itself

Claim 53. The air-conditioning apparatus of claim 44 wherein the regulating means regulates room pressure by setting the supply air motor to supply a set increased supply air pressure.

VAV

Claim 54. The air-conditioning apparatus of Claim 44 further comprising an exhaust air motor to withdraw air from the at least one room through an exhaust air channel.

exhaust motor control

Claim 55. The air-conditioning apparatus of Claim 54 further comprising means for regulating exhaust air motor to adjust an amount of exhaust air withdrawn from the at least one room.

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Claim 56. The air-conditioning apparatus of claim 54 wherein the regulating means regulates the room pressure by setting the supply air motor to supply a set increased supply air pressure and by setting the exhaust air motor to withdraw a set amount of exhaust air from the at least one room.

Claim 57. The air-conditioning apparatus of Claim 54 wherein the regulating means regulates the room pressure by adjusting the exhaust air motor, to adjust an amount of air withdrawn from the room through the exhaust air channel.

Claim 58. The air-conditioning apparatus of Claim 55 wherein the regulating means adjusts the room pressure by adjusting the exhaust air regulating means to control the amount of exhaust air withdrawn from the room.

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Claim 59. The air-conditioning apparatus of Claim 54 wherein the room pressure is a measured difference between a value of the supply air pressure and a value of an exhaust air pressure.

Claim 60. The air-conditioning apparatus of Claim 44 wherein the regulating means effects a change in room pressure only when an outside temperature changes within a predetermined temperature range, and when the outside temperature is lower than the predetermined temperature range, the regulating means effects a room pressure having a first constant value, and when the outside temperature is higher than the predetermined temperature range, the regulating means effects a room pressure having a second constant value.

First Species

Claim 61. The air-conditioning apparatus of Claim 44 wherein the regulating means change a supply air pressure only when the supply air temperature changes within a predetermined temperature range, and when an outside air temperature is lower than the predetermined temperature range, the regulating means adjusts the supply air pressure to have a first constant value, and when the supply air temperature is higher than the predetermined temperature range, the regulating means adjusts the supply air pressure to have a second constant value.

First Species

Claim 62. The air-conditioning apparatus of Claim 60 wherein the regulating means decreases the room pressure from a selected maximum room pressure to a selected minimum room pressure relative to an increase of the outside temperature within the predetermined temperature range.

First Species

Claim 63. The air-conditioning apparatus of Claim 61 wherein the supply air pressure is decreased by the regulating means in correspondence to a decrease of a difference between the selected room temperature and an actual room temperature.

? → Embodiment VAV.